### JAN 2 5 2013

### 510(K) SUMMARY

This summary of 5IO(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA I990 and 21 CFR §807.92.

The assigned 510(k) number is: 123008

1. <u>Submitter's Identification:</u>

BIONIME CORPORRATION

NO 694, RENHUA ROAD, DALI DIST., TAICHUNG CITY, TAIWAN 412

Contact Person: Mr. Roy Huang

Phone Number: 886-4-24951268 FAX Number: 886-4-24952568

Date Summary Prepared: September 24, 2012

Name of the Device:

Rightest Blood Glucose Monitoring System GM700 GE200 Blood Glucose Monitoring System Rightest Blood Glucose Monitoring System GM650 GE300 Talking Blood Glucose Monitoring System

Common or Usual Name: Glucose test system

Product Code	Classification	Regulation Section	Panel
NBW; System, Test, Blood	Class II	21 CFR 862.1345	Clinical Chemistry
Glucose, Over-the-Counter			75
LFR; Glucose	Class II	21 CFR 862.1345	Clinical Chemistry
Dehydrogenase, Glucose			75

# 4. <u>Device Description:</u>

4.1 Our Rightest Blood Glucose Monitoring System GM700 consists of the following devices: Rightest Blood Glucose Meter GM700, Rightest Blood Glucose Test Strip GS700, Rightest Control Solution GC700, lancing device and sterile lancets. The Rightest Blood Glucose Meter GM700, Rightest Blood Glucose Test Strips GS700, and Lancing Device are manufactured by BIONIME Corporation. The Rightest Blood Glucose Meter GM700, when used with the Rightest Blood Glucose Test Strips GS700, quantitatively measures glucose in fresh capillary whole blood. The performance of the Rightest Blood Glucose Monitoring System GM700 is verified by the Rightest Control Solution GC700.

- 4.2 Our GE200 Blood Glucose Monitoring System consists of the following devices: GE200 Blood Glucose Meter, GE200 Blood Glucose Test Strip, GE200 Control Solution, lancing device and sterile lancets. The GE200 Blood Glucose Meter, GE200 Blood Glucose Test Strips, and Lancing Device are manufactured by BIONIME Corporation. The GE200 Blood Glucose Meter, when used with the GE200 Blood Glucose Test Strips, quantitatively measures glucose in fresh capillary whole blood. The performance of the GE200 Blood Glucose Monitoring System is verified by the GE200 Control Solution.
- 4.3 Our Rightest Blood Glucose Monitoring System GM650 consists of the following devices: Rightest Blood Glucose Meter GM650, Rightest Blood Glucose Test Strip GS650, Rightest Control Solution GC650, lancing device and sterile lancets. The Rightest Blood Glucose Meter GM650, Rightest Blood Glucose Test Strips GS650, and Lancing Device are manufactured by BIONIME Corporation. The Rightest Blood Glucose Meter GM650, when used with the Rightest Blood Glucose Test Strips GS650, quantitatively measures glucose in fresh capillary whole blood. The performance of the Rightest Blood Glucose Monitoring System GM650 is verified by the Rightest Control Solution GC650.
- 4.4 Our GE300 Talking Blood Glucose Monitoring System consists of the following devices: GE300 Talking Blood Glucose Meter, GE300 Talking Blood Glucose Test Strip, GE300 Series Control Solution, lancing device and sterile lancets. The GE300 Talking Blood Glucose Meter, GE300 Talking Blood Glucose Test Strips, and Lancing Device are manufactured by BIONIME Corporation. The GE300 Talking Blood Glucose Meter, when used with the GE300 Talking Blood Glucose Test Strips, quantitatively measures glucose in fresh capillary whole blood. The performance of the GE300 Talking Blood Glucose Monitoring System is verified by the GE300 Series Control Solution.

### 5. Intended Use:

5.1 The Rightest Blood Glucose Monitoring System GM700 is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The Rightest Blood Glucose Monitoring System GM700 is intended to be used by a single person and should not be shared.

The Rightest Blood Glucose Monitoring System GM700 is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The Rightest Blood Glucose Monitoring System GM700 should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The Rightest Blood Glucose Test Strips GS700 are for use with the Rightest Blood Glucose Meter GM700 to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

5.2 The GE200 Blood Glucose Monitoring System is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The GE200 Blood Glucose Monitoring System is intended to be used by a single person and should not be shared.

The GE200 Blood Glucose Monitoring System is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The GE200 Blood Glucose Monitoring System should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The GE200 Blood Glucose Test Strips are for use with the GE200 Blood Glucose Meter to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

5.3 The Rightest Blood Glucose Monitoring System GM650 is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The Rightest Blood Glucose Monitoring System GM650 is intended to be used by a single person and should not be shared.

The Rightest Blood Glucose Monitoring System GM650 is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The Rightest Blood Glucose Monitoring System GM650 should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The Rightest Blood Glucose Test Strips GS650 are for use with the Rightest Blood Glucose Meter GM650 to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

5.4 The GE300 Talking Blood Glucose Monitoring System is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The GE300 Talking Blood Glucose Monitoring System is intended to be used by a single person and should not be shared.

The GE300 Talking Blood Glucose Monitoring System is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The GE300 Talking Blood Glucose Monitoring System should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The GE300 Talking Blood Glucose Test Strips are for use with the GE300 Talking Blood Glucose Meter to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

### 6. Predicate Device Information:

The Rightest Blood Glucose Monitoring System GM700 and the GE200 Blood Glucose Monitoring System are substantially equivalent to the brand of Rightest Blood Glucose Monitoring System noted below.

Name:

Rightest Blood Glucose Monitoring System GM700

Device Company:

Bionime Corporation

510(K) Number:

K110737.

The Rightest Blood Glucose Monitoring System GM650 and the GE300 Talking Blood Glucose Monitoring System are substantially equivalent to the brand of Rightest Blood Glucose Monitoring System noted below.

Name:

Rightest Blood Glucose Monitoring System GM650

Device Company:

Bionime Corporation

510(K) Number:

K120423.

# 7. Comparison to Predicate Devices:

### **Specification Comparison**

	New Device	Predicate Device
Item	GE200 Rightest GM700	Rightest GM700 (k110737)
	Similarities	
Test Time	5 se	conds
Measuring Range	20-60	0 mg/dL

Hematocrit Range		30 -	55%
Operating Relative Humidity Range		10 ~	90%
Operating Temperature Range		43 ~111 °F	(6 ~ 44°C)
Battery Life		About 1	000 tests
Monitor		LCD	display
Memory Capacity	1000 blood	d glucose test	results with date and time
Coding		Auto	coding
Meter Storage Conditions		14 ~140 °F	(-10 ~ 60°C )
Test Strip Storage Conditions	39 ~86 °l	F (4 ~ 30°C ),	< 90% relative humidity
The unit of measurement data		Fix on	mg/dL
Sample	-	Capillary whole blood	
Measurement Technology	Dehydrogenase Electrochemical Sensor		
	Differer	nces	
Minimum Sample Volume	0.75 m	icroliter	1.0 microliter
	Uric acid	≧ 16 mg/dL	
,	Xylose ≧ 10 mg/dL		Uric acid ≧ 10 mg/dL
Interference	Ascorbic acid ≧ 3 mg/dL		
	Dopamine HC	l ≧ 1.25 mg/dL	Xylose ≧ 10 mg/dL
	L-Dopa ≧	≧ 2 mg/dL	
	1.FAD-glucose [	Dehydrogenase	1.FAD-glucose Dehydrogenase
	(FAD-GDH) 12.		(FAD-GDH) 9.0%
Strip Reagent	2.Potassium ferr	-	2.Potassium ferricyanide 53.7%
	3.Non-reactive in 39.4%	ngrealents	3.Non-reactive ingredients 37.3%
	Two CR2032		·
Power Supply	batteries	Or	ne CR2032 batteries
Meter Dimension	96mm*46mm*1	98 mm × 46 mm × 17.5 mm	
	7.5mm		
Meter Weight	65.0 ± 5 g with batteries	57.	0 ± 5 g with batteries
LCD display area	37 mm × 55mm		32 mm × 52mm

.

Backlight	Yes	No
Control solution	Level 1, 2 and 4	L1, L2, L3, L4, L5

# Specification Comparison

ltam	New Device Predicate Device	
Item	Rightest GM650 / Rightest GM650 (k120423)	
	GE300 Talking	
	Similarities	
Minimum Sample Volume	0.75 microliter	
Test Time	5 seconds	
Measuring Range	20-600 mg/dL	
Hematocrit Range	30 - 55%	
Operating Relative Humidity	10 ~ 90%	
Range	10 - 90 %	
Operating Temperature Range	43 ~111 °F (6 ~ 44°C )	
Battery Life	About 1000 tests	
Monitor	LCD display	
Memory Capacity	500 blood glucose test results with date and time	
Coding	Auto coding	
Meter Storage Conditions	14 ~140 °F (-10 ~ 60°C )	
Test Strip Storage Conditions	$39 \sim 86 ^{\circ}\text{F}  (4 \sim 30 ^{\circ}\text{C})$ , < $90 ^{\circ}\text{M}  \text{relative humidity}$	
The unit of measurement data	Fix on mg/dL	
Sample	Capillary whole blood	
Measurement Technology	Dehydrogenase Electrochemical Sensor	
Power Supply	Two 1.5V (AAA) batteries	
Meter Dimension	50 mm × 18 mm × 105 mm	
Meter Weight	80.0 ± 5 g with batteries	
LCD display area	48 mm × 34 mm	

Backlight	No		
Control solution	Level 1, 2 and 4		
Voice Function	Y	es	
Data Transmission	Infr	ared	
Stereo jack	Y	es	
Voice repeat button	Y	es	
	Differences		
Interference	Uric acid ≧ 16 mg/dL  Xylose ≧ 10 mg/dL  Ascorbic acid ≧ 3 mg/dL  Dopamine HCl ≧ 1.25 mg/dL  L-Dopa ≧ 2 mg/dL	Uric acid ≧ 10 mg/dL Xylose ≧ 10 mg/dL	
Strip Reagent	1.FAD-glucose Dehydrogenase (FAD-GDH) 12.1% 2.Potassium ferricyanide 48.5% 3.Non-reactive ingredients 39.4%	1.FAD-glucose Dehydrogenase (FAD-GDH) 9.0% 2.Potassium ferricyanide 53.7% 3.Non-reactive ingredients 37.3%	

# 8. <u>Discussion of Non-Clinical Tests Performed for Determination of Substantial Equivalence are as follows:</u>

Verification and validation of test results were evaluated to establish the performance, functionality and reliability of the Rightest Blood Glucose Monitoring System GM700, the GE200 Blood Glucose Monitoring System, the Rightest Blood Glucose Monitoring System GM650, and the GE300 Talking Blood Glucose Monitoring System. The evaluation included precision, linearity, interference, sample volume and hematocrit.

# 9. Conclusions:

Results of performance evaluation of the Rightest Blood Glucose Monitoring System GM700, the GE200 Blood Glucose Monitoring System, the Rightest Blood Glucose Monitoring System GM650, and the GE300 Talking Blood Glucose Monitoring System demonstrate that the devise is substantial equivalence to the predicate

device, Rightest Blood Glucose Monitoring System GM700 and Rightest Blood Glucose Monitoring System GM650.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

January 25, 2013

Bionime Corporation c/o MDI Consultant, Inc. Jigar Shah 55 Northern Blvd, Suite 200 Great Neck, NY 11021

Re: k123008

Trade/Device Name: Rightest Blood Glucose Monitoring System GM700,

GE200 Blood Glucose Monitoring System

Rightest Blood Glucose Monitoring System GM650 GE300 Talking Blood Glucose Monitoring System

Regulation Number: 21 CFR 862.1345 Regulation Name: Glucose test system

Regulatory Class: II

Product Code: NBW, LFR Dated: December 27, 2012 Received: December 28, 2012

Dear Mr. Shah:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Carol C. Benson

Courtney H. Lias, Ph.D.
Director
Division of Chemistry and Toxicology Devices
Office of In Vitro Diagnostics
and Radiological Health
Center for Devices and Radiological Health

for

Enclosure

510(k) Number (if known): k123008

Device Name: Rightest Blood Glucose Monitoring System GM700

Indications For Use:

The Rightest Blood Glucose Monitoring System GM700 is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The Rightest Blood Glucose Monitoring System GM700 is intended to be used by a single person and should not be shared.

The Rightest Blood Glucose Monitoring System GM700 is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The Rightest Blood Glucose Monitoring System GM700 should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The Rightest Blood Glucose Test Strips GS700 are for use with the Rightest Blood Glucose Meter GM700 to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

Prescription Use AND/OR (Part 21 CFR 801 Subpart D)	Over-The-Counter UseX (21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS	LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
<u>.                                      </u>	

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

# Katherine Serrano

Division Sign-Off	<u> </u>
Office of In Vitro Diagnostics	and Radiological Health
510(k) <u>k123008</u>	4

510(k) Number (if known): K123008

Device Name: GE200 Blood Glucose Monitoring System

Indications For Use:

The GE200 Blood Glucose Monitoring System is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The GE200 Blood Glucose Monitoring System is intended to be used by a single person and should not be shared.

The GE200 Blood Glucose Monitoring System is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The GE200 Blood Glucose Monitoring System should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The GE200 Blood Glucose Test Strips are for use with the GE200 Blood Glucose Meter to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

Prescription Use AND/OR (Part 21 CFR 801 Subpart D)	Over-The-Counter UseX (21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS	LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of In	Vitro Diagnostics and Radiological Health (OIR)

# Katherine Serrano

Division Sign-Off	
Office of In Vitro Diagnostics and Radiological Healt	th
510(k) k123008	

510(k) Number (if known):K123008

Device Name: Rightest Blood Glucose Monitoring System GM650

Indications For Use:

The Rightest Blood Glucose Monitoring System GM650 is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The Rightest Blood Glucose Monitoring System GM650 is intended to be used by a single person and should not be shared.

The Rightest Blood Glucose Monitoring System GM650 is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The Rightest Blood Glucose Monitoring System GM650 should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The Rightest Blood Glucose Test Strips GS650 are for use with the Rightest Blood Glucose Meter GM650 to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

Prescription Use AND/OR (Part 21 CFR 801 Subpart D)	Over-The-Counter UseX_ (21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS	S LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of In	Vitro Diagnostics and Radiological Health (OIP)

Katherine Serrano

Division Sign-Off
Office of In Vitro Diagnostics and Radiological Health
510(k) k123008

510(k) Number (if known):K123008

Device Name: GE300 Talking Blood Glucose Monitoring System

Indications For Use:

The GE300 Talking Blood Glucose Monitoring System is intended to be used for the quantitative measurement of glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm. The GE300 Talking Blood Glucose Monitoring System is intended to be used by a single person and should not be shared.

The GE300 Talking Blood Glucose Monitoring System is intended for self testing outside the body (in vitro diagnostic use) by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. The GE300 Talking Blood Glucose Monitoring System should not be used for the diagnosis of, or screening for diabetes or for neonatal use. Alternative site testing should be done only during steady - state times (when glucose is not changing rapidly).

The GE300 Talking Blood Glucose Test Strips are for use with the GE300 Talking Blood Glucose Meter to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from the fingertips, forearm or palm.

Prescription Use AND/OR (Part 21 CFR 801 Subpart D)	Over-The-Counter Use XX(21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW TH	S LINE-CONTINUE ON ANOTHER PAGE IF NEEDED
•	
Concurrence of CDRH, Office of I	n Vitro Diagnostics and Radiological Health (OIR)
1.6 - 1	

Katherine Serrano

Division Sign-Off
Office of In Vitro Diagnostics and Radiological Health
510(k) k123008